SENTIENT

SUPERIOR SECURITY

A16RQ / A17RQ

USER'S MANUAL

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Welcome

Thank you for purchasing our **960H CCTV kit.**

This user's manual is designed to be a reference tool for the operation of your system.

Do not worry, you do not have to read this entire manual to be up and running. There should be a quickstart guide found with your DVR device, which will show you how to setup the connections to the DVR correctly and how to setup a remote monitoring connection.

Here you can find information about the corresponding DVR's features and functions, as well as a detailed menu tree.

Before installation and operation please read the following safeguards and warnings carefully!

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BEFORE YOU BEGIN

Important Safeguards and Warnings

1 . Electrical safety

- All installation and operation should conform to your local electrical safety codes.
- We assume no liability or responsibility for any fires or electrical shock caused by improper handling or installation.

2 . Transportation security

- Heavy stress, violent vibration or water splash should be avoided during transportation, storage and installation.

3 . Installation

- Keep upright. Handle with care.
- Do not apply power to the DVR before completing installation.
- Do not place objects on top of the DVR

4 . Qualified engineers needed

- All examination and repair work should be done by qualified service engineers.
- We are not liable for any problems caused by unauthorised modifications or attempted repair.

5 . Environment

- The DVR should be installed in a cool, dry place away from direct sunlight and inflammable or explosive substances, etc.
- This product should be transported, stored and operated in an environment ranging from 0℃ to 55 ℃.

6. Accessories

- Be sure to use all the accessories available in the Sentient range.
- Before installation, please open the package and check all the components are included.
- Contact your local Maplin outlet if something is broken or missing in your package.

7. Lithium battery

- Improper battery use may result in fire, explosion, or personal injury.
- When replacing the battery, please make sure you use the same model. (CR2032 Motherboard battery).

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1 FEATURES AND QUICK SETUP

1.1 Product Overview

This product is designed specifically for the use in the field of video surveillance and adopts H.264 video compression, hard disk recording, TCP/IP transmission and a Linux based OS in addition to some of the most advanced technology in the information technology industry. These elements help to produce a more stable, reliable and higher quality video image. The products support synchronised video, audio recording, playback, monitoring and the synchronisation of audio and video. The products support advanced control technology and strong network data transmission capacity.

1.2 Features

Real-time monitoring
Composite video signal interface and support TV, VGA or HDMI output simultaneously.

Compression function
Uses H.264 video compression standard and G.711 audio compression standard and has high definition, low code rate of the video coding to decrease the amount of data to save to HDD storage.

Recording function
Supports timing, alarm alerts, motion detection, SATA hard and local hard disks, DVR data backup and network backup.

Video playback function
You can search videos, within the local network, by using the playback interface. As well as this it supports multiple videos playback, fast playing, slow playing and frame-by-frame playback. Video playback can be displayed the exact time of the incident using a graphical timeline to allow you to search for event footage much more efficiently.

Camera control and alarm
Remotely installed cameras can be controlled and various alarm devices can be connected to ensure that you know when an event has been detected. The DVR integrates Dynamic detection, video loss, video block, multiple alarm output and scene lighting control into its controller options.

Communication Interface
Equiped with USB 2.0 high-speed interface and an ESATA interface to allow for external video backup devices. There is also an option to store data on a remote server (cloud storage location) by connected the DVR to a local or wide area network by using the standard Ethernet interface port (plug and play).

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Network functions

Supports:

- **TCP / IP**
- **UDP**
- **RTP / RTSP**
- **DHCP**
- **PPPOE**
- **DDNS**
- **NTP**

Also supports real-time network monitoring, video playback, control and management functions. The built-in WEB Server will allow you to directly access the DVR through a web browser.

Mode of operation
You can operate by the DVR's front panel or using a mouse. A simple, intuitive graphical interface is provided for intuitive operation.

1.3 Installation

1.3.1 Unpacking Inspection

When you receive the product pleae check that all items are present according to the packing list on the reverse of the box.

1.3.2 Wiring Installation

Prepare for installation
Prepare your cameras, TV/display monitor, video cables, network cables, the mouse, and power cables on a large clean flat surface.

Installation Steps:

(See quick startup guide page 4)

⚠**NOTE: Before installing anything we strongly recommend that you connect your cameras to your dvr and test your system first.**

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⚠**NOTE: WE CHECK EVERYTHING TO MAKE SURE IT IS WORKING WHEN IT LEAVES US BUT OCCASIONALLY THINGS FAIL AND IT IS BETTER TO KNOW NOW THAN AFTER YOU HAVE FITTED EVERYTHING!**

1. Place the DVR on a flat horizontal position and connect your cameras to the video input on the rear of the DVR.

2. Connect your TV/ display monitor to the video output on the rear of the DVR.

3. Connect the network cable to the RJ45 socket on the rear of the DVR then connect the other end of the cable to a spare socket on the router.

4. Connect the Mouse to the USB interface found in either the front or rear panels.

5. Connect your DVR a power outlet and switch on the power.

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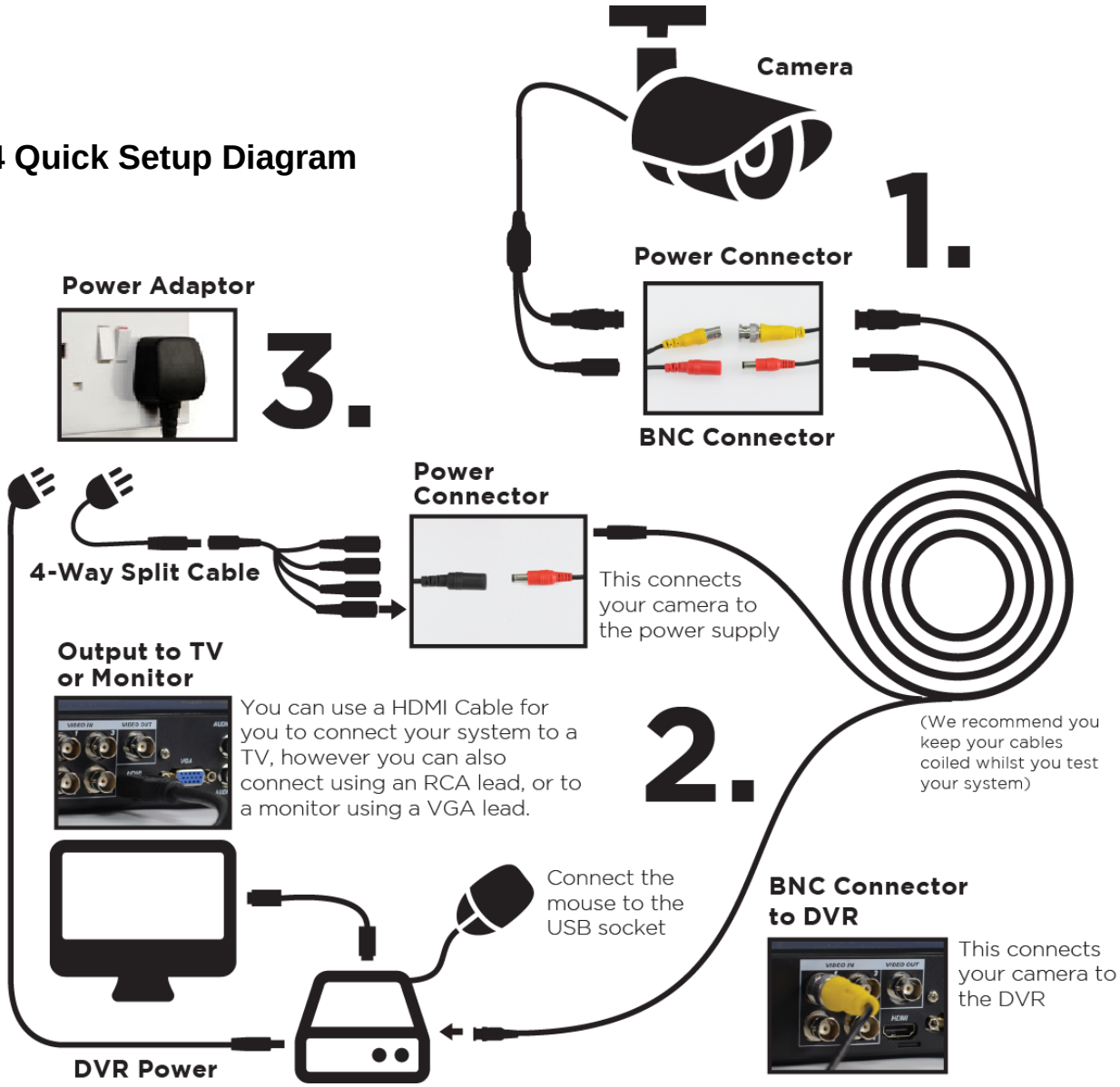
1.4 Quick Setup Diagram


Camera
1.
Power Connector
BNC Connector
Power Adaptor
3.
Power Connector
4-Way Split Cable
This connects your camera to the power supply
Output to TV or Monitor
You can use a HDMI Cable for you to connect your system to a TV, however you can also connect using an RCA lead, or to a monitor using a VGA lead.
2.
(We recommend you keep your cables coiled whilst you test your system)
Connect the mouse to the USB socket
BNC Connector to DVR
This connects your camera to the DVR
DVR Power

1.5 Smart Phone Setup for Live View & Remote Playback

For the convenience of monitoring your Sentient security system on the move via your smart phone we have provided a quick and simple remote connection setup service. Please follow the steps below closely to successfully setup the connection for live view and remote playback. See next page for step-by-step setup instructions.

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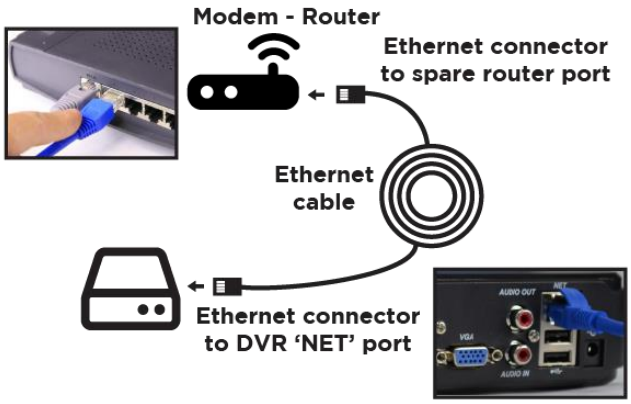
1. Internet connection
Connect the Ethernet cable into the 'Net' port on the rear of the device, then connect the other end into one of the spare ports on your modem-router, as shown below.



2. Step 1: Download Sentient 960H app
Turn the power on to the DVR device. When it has fully booted up, you will be presented with a 'Startup Wizard' window displayed on your monitor.

Using a QR scan app, scan the corresponding QR code to the operating system on your phone, i.e. scan the iOS QR code if you have an iPhone.

3. Download & install Sentient 960H app
Select the Sentient 960H app (Blue icon) and install on to your smart phone

ANDROID APP iOS (APPLE) APP

4. Add new device
Once installed, open it up and press the button: '+ Device'.

5. Scan unique device QR code
The next screen will have an icon of a QR code, select this to use the inbuilt QR scanner. Scan QR code found on Step 2 of the Startup Wizard, shown on your monitor screen.

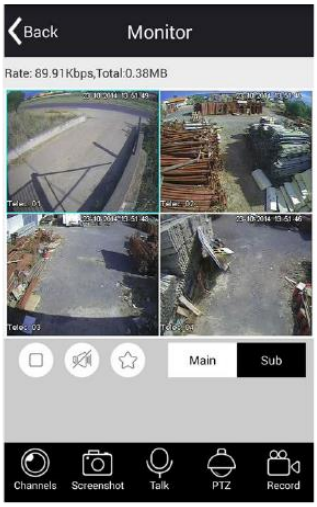
Scan here

6. View Live feed cameras
Your DVR will now be shown on the list of devices along with a list of camera channels.

The video channel display screen will then allow you to view the cameras connected to the DVR.

Playback
To playback and review footage select the icon shown here found on the device list screen:

Choose the date, time and channel you wish to view footage from and then the app will search for recorded footage to review.



Success! You should now be fully setup.

1.6 The Mouse

The mouse is used to operate all aspects DVR.

Right mouse click is used to:

- Open up a new menu in the real-time monitoring screen.
- Exit the current screen without saving.

Left click is used to:

- Enter the desired menu or the main screen.
- Select menu options.
- Select/unselect the checkboxes.

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Double Click is used to:

- Play video.
- Make selected camera full screen or to exit full screen mode.

Mouse Drag can be used to select:

- Area for facial detection.
- Areas to block (for motion detection).

1.7 On-screen keyboard

The onscreen keyboard is operated via the mouse's left click. To enter passwords, usernames, values, etc.

Shift = Caps on/Caps off
Left pointing arrow = Left/delete
␣ = Space between characters

1.8 Power On/Off

1.8.1 Power On

Install the DVR correctly (as above) and then connect the power. The DVR LED should light up light up and the DVR will boot automatically.

The DVR will then automatically detect any connected hardware (cameras, monitors, etc.), this process should last about 20 Seconds. When this process has been completed the DVR will enter the multi-screen real-time surveillance mode.

If your hard drive is not properly connected, the following message will appear on your screen.

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Below is the multi-screen real-time surveillance mode:

⚠**NOTE: Please do not use any type of power supply which is different from the power supply included in this kit.**

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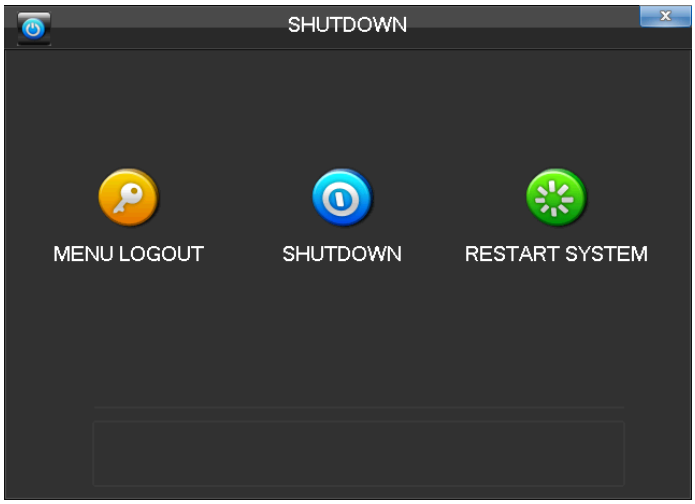
1.8.2 Power Off

Right mouse click →【Main Menu】→【Shutdown】



NOTE: Only change or attempt to reconnect the hard disk drive after shutting down the DVR.

1.8.3 Power recovery

After an unexpected power shortage or forced shutdown the DVR will save any footage recorded before the power outage and should return to the normal operation mode once it has restarted.

1.9 Icon

1.9.1 Icons

: The channel is recording.

: The video feed of the channel has been lost.

: Motion detection functionality is on.

: The channel is currently in monitoring and locked status.

: Adjust the volume of audio output.

: Slideshow of all connected cameras, in full screen.

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1.9.2 Operation Icons

: Not selected.

: Selected.

: The drop - down button

OK: Leave the interface.

Cancel: Cancel the settings.

Select: Set parameters.

Save: Save parameters

Default: Restore the factory settings.

App.: Apply current settings to the system.

Copy: Copy current settings to other channels.

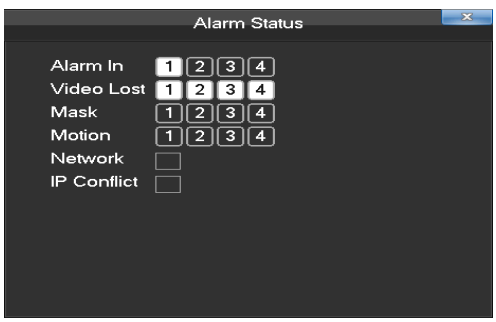
Set: Enter the configuration interface.

Process: Select and configure the processing operation triggered by video detection or alarm.

1.10 The Real-time Browser

There are date, channel name, record icon and alarm status icon in each real-time monitoring screen. Switch screens by the front panel, a remote control or a mouse.

If screen prompts of external alarm, video loss, occlusion detection, dynamic detection, network connection and IP conflict is set, the following interface will pop up when the relevant alarm occurs.



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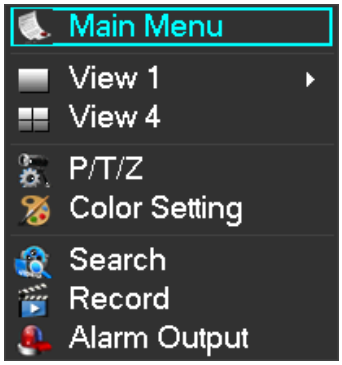
2 OPERATIONS GUIDE

2.1 The Right-click Menu

Enter the real-time channel browsing interface. Click the right button on the mouse to bring up the pop-up menu as shown in the figure below.

The Right button menu:



2.1.1 The Screen Switching

Users can choose to have either single, four, nine or sixteen channels.

2.1.2 Color setting

If you need to set a certain colour level configuration on the channel browsing display interface for a certain time of day (e.g. one configuration for the daytime and another configuration for the night time), you can set this up via the ‘Colour Setting’ menu found on the right-click menu. You can set two time periods for two seperate colour configurations that suit the lighting environment around where you view the footage from the cameras on the display monitor.

Image color hue, brightness, contrast, saturation, gain and white-level parameters can all be adjusted to desired levels. See screen shot of the Colour Setting menu on the next page.

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【Period】: Two periods can be set according to ambient light during the day and night, device will automatically switch configuration time. Need to select the Enable box.
【Hue】: Adjust the image color cast.
【Brightness】: Visual image brightness (according to the environment), reduces or increases the brightness of the image to try to make it clearer.
【Contrast】: Adjusts the black and white colours of the image (the greater the ratio, the brighter the image).
【Saturation】: Image color purity. The greater the value the more colourful the images will become.

⚠ **NOTE: Different mode different function**

2.1.3 The Video Inquiry

Refer to Chapter 2.3.

2.1.4 Alarm output

⚠ **NOTE: only users who have the highest priority setting on their profile can use the manual recording function.**

In the real-time monitoring screen, right click and select ‘Record’ to enter the following interface.

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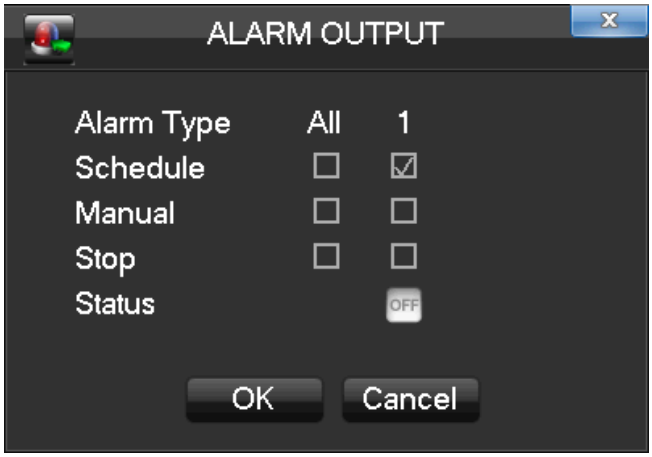
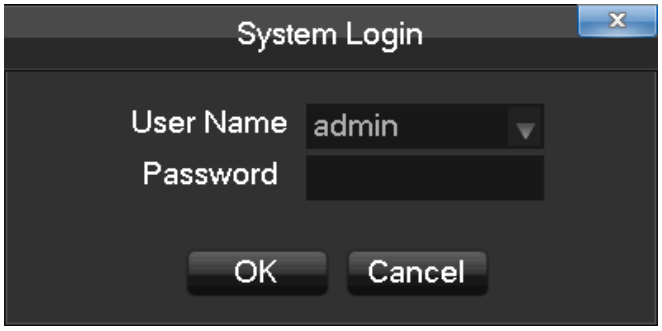


【**Channels**】The number of channels that are in alarm status mode.
【**Schedule**】Alarm output are in control of the alarm configuration.
【**Manual**】Alarm output is on and the status is active.
【**Stop**】Alarm output is off and the status is inactive.
【**Status**】The current status of alarm output.

2.1.5 The Main Menu

Left click in the real-time monitoring screen. Input a user name and a password.



Default users:

User Type	Name	Default Password
Administrator	admin	123456
User	user	123456
Hidden	default	default

⚠**NOTE: security measures of the password: If you input the wrong password three times, the device will produce an alarm sound. After incorrectly inputting the password in five times, the account will be locked. Please change the default password and the user name. Refer to Chapter 2.4.5 'Accounts' for more details.**

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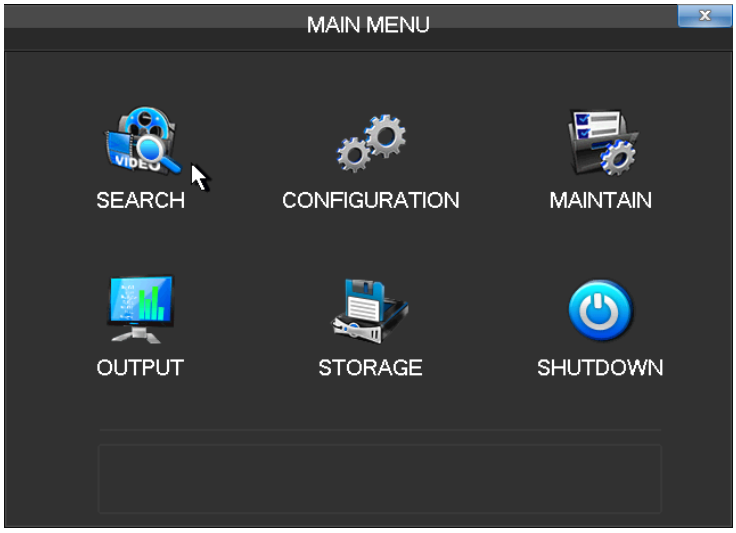
2.2 The Introduction of the Main Menu



【**Search**】Search recorded footage by types, channels, time and playback records.
【**Configuration**】Includes; system, record, network, abnormity, alarm, account.
【**Storage**】HDD management and backup
【**Output**】Options include: alarm output, serial and display.
【**Maintain**】Displays; log information, version information, stream statistics, online users, sets the factory default & automatic maintenance.
【**Shutdown**】Log off from the user menu, turn off the machine, restart the system, and switch user and other operations.

2.3 The Video Inquiry

In the real-time monitoring screen, right click and select【search】to enter the search interface.

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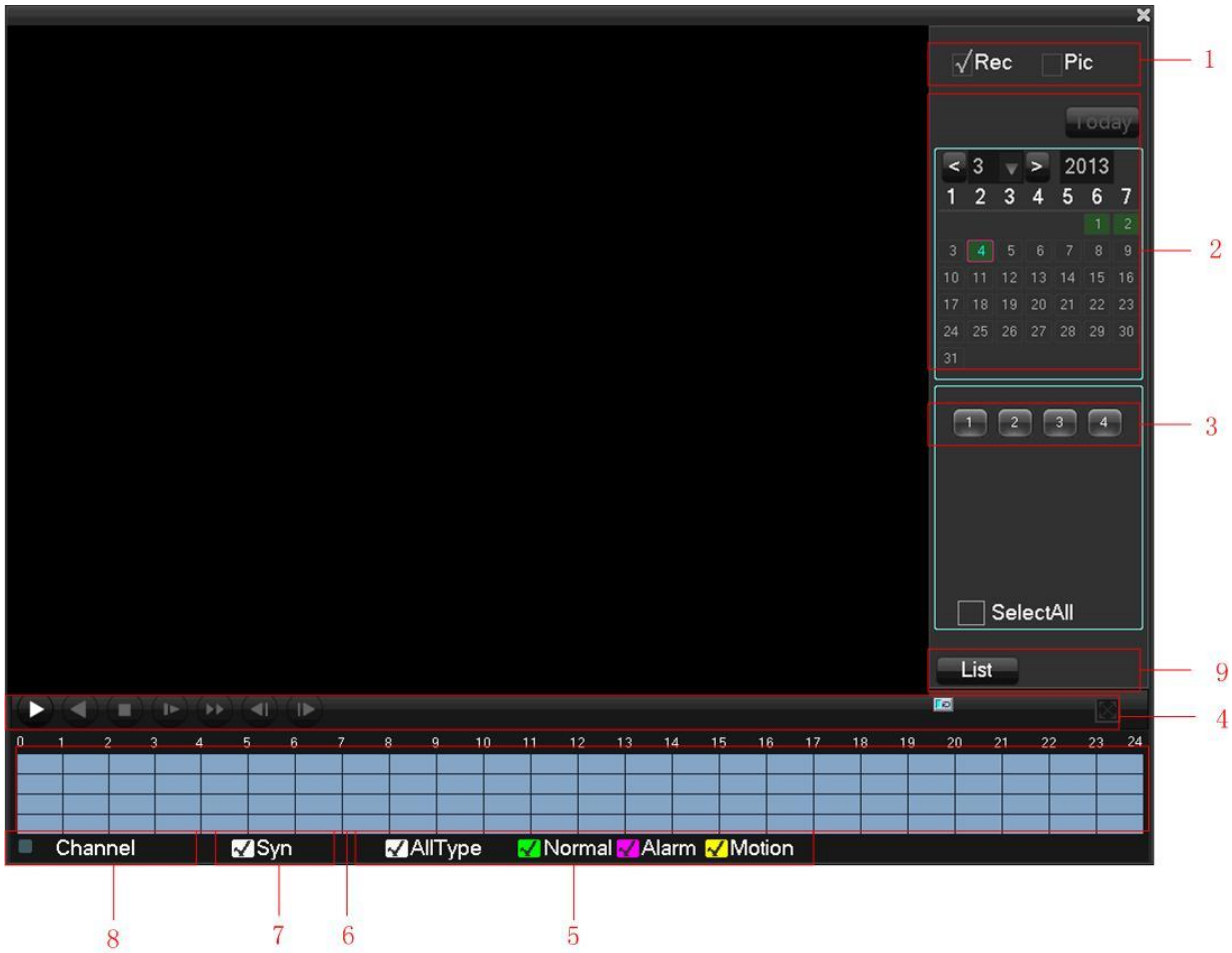

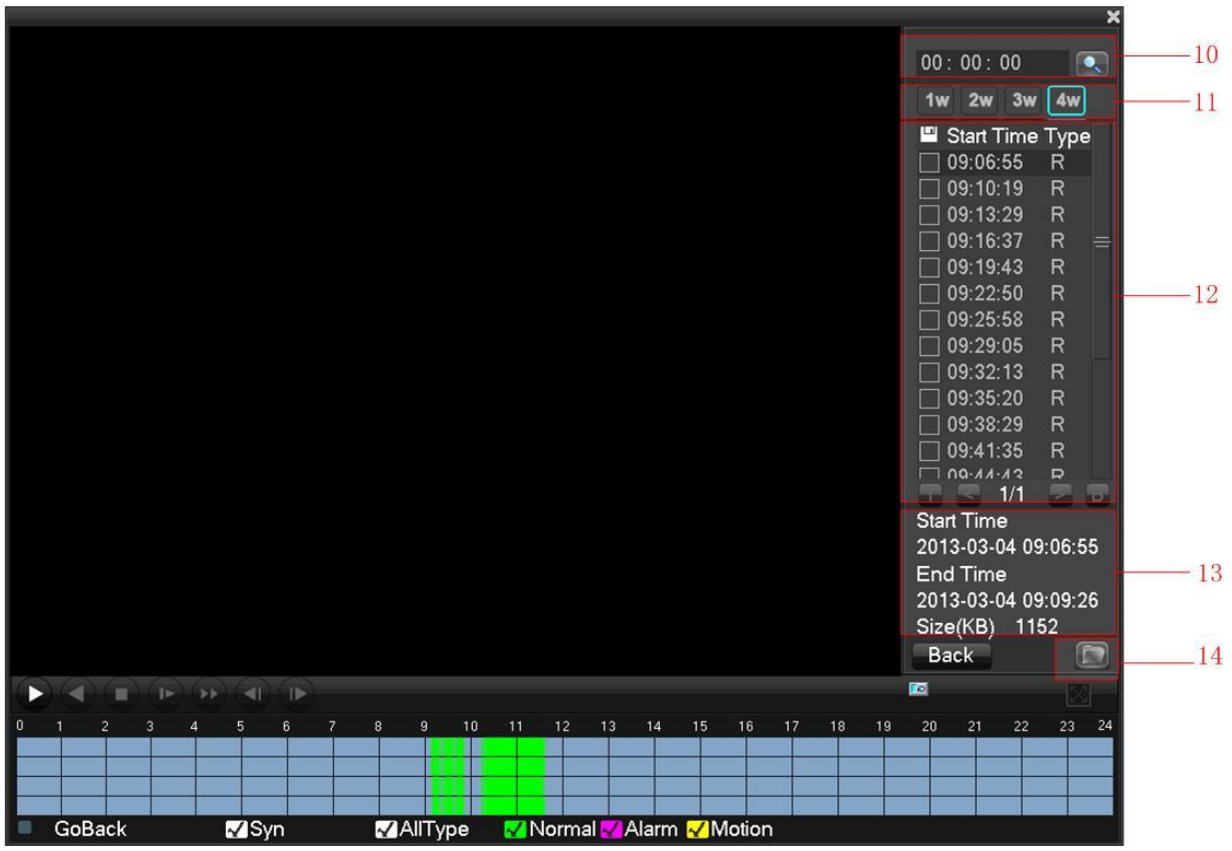

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Record Search interface description:

Index	Type	Description
1	Record	Two options to select either videos or pictures to search through. A tick will appear in the box when one is selected.
2	Choose the time	Allows you to select the day of the recording you wish to view.
3	Choose the channels	Allows you to select the camera channel you wish to view the recorded footage from.
4	Playback controls	The options here can allow you to view footage in full-screen mode, to cycle through the footage, stopping / playing, pausing, fast forward, slow play, and the previous/next frame in a suspended state.
5	Recoding mode	Select this option for the timeline to display at what point on the day if/any footage was recored (displayed as green bars), when the alarm sensor was set off (displayed as pink bars), and when the motion detection sensor was set off (displayed as yellow bars).
6	The timeline of the videos	Shows the status information of channels' video recording within one day by using green, red, yellow colours to highlight timeline.
7	Synchronisation	Synchronises all footage within the timeline to the same time.
8	Status	Displays status information of the function keys, which includes the fast-forward speed, slow speed, etc.
9	List	Displays the list of recorded files.
10	Time inquiries	Search the records based on the footage start time.
11	The channel number	Select the channel number.
12	The list of records	Up to 128 video records can be shown in the searching list. Choose file(s) and press enter or double click mouse to view record. File type: **R**—normal record, **A**—alarm record; **M**—motion detection record.
13	Details of the documents	Displays the start time, end time, and the size of the video file.
14	Backup	Tick to backup file in file list box, click the backup button， cancel backup file ---click "√" from backup menu "√".

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Playback Control:

Key	Description	Remark
Video playback: **Fast-forward button**	Under playback mode, whilst pressing this key, you can get a variety of fast cycle switching speeds; the fast-forward button can be used as slow-release button or a reverse switch key.	
Video playback : **Slow key**	Under playback mode, whilst pressing this key, switch through this in a cycle. Supports a variety of slow-release rates. The slow release button can be used as fast-forward button or a reverse switch key.	
Play/pause►/	Play/pause switch when in slow-play.	
Backward: Backward key	Single left click = backward key.	To play in reverse; single click again to stop normal playback. Then click rewind or the single-frame playback function, press the play button ►/ to enter the normal playback.
Manual single frame playback	View single frame playback by clicking left mouse button when common playback is paused.	

⚠**NOTE: The player's playback control bar shows file playback speed, channel, time, playback progress, etc.**

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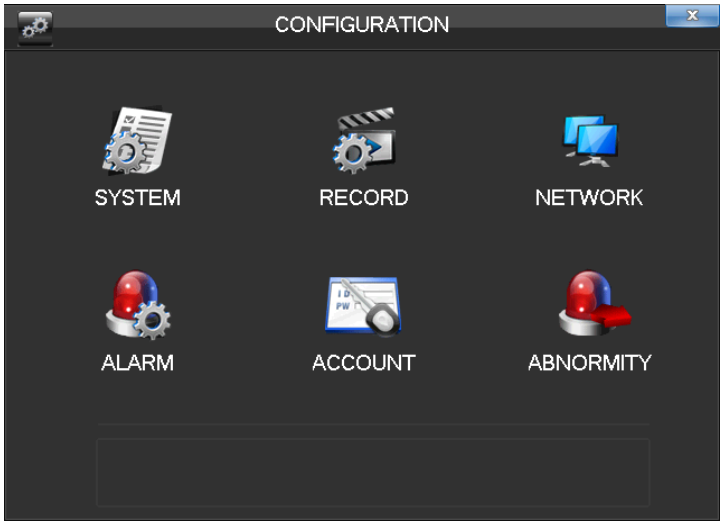
2.4 Configuration

The user can get into the ‘Configuration’ menu via the main menu. The Configuration menu is shown below:



2.4.1 System

Select ‘System’ within the configuration menu:

【Time】Set the current time and to save it to memory.
【Date Format】Modify the date format.
【Snapshot Interval】The snapshot interval time
【DST】Select the button and set the starting and ending time.
【Time Format】24 hr or 12 hr mode
【Language】 Select a language.
【Full HDD】When HDD is full, there are two options: “Overwrite” or “Stop recording”.

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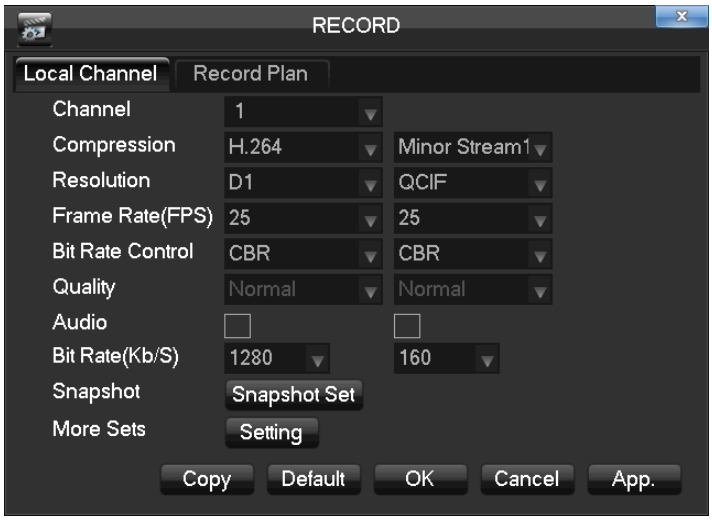
If you select “Overwrite”, the DVR will overwrite the earliest files and continue recording. If you select “Stop recording”, the DVR will stop recording.

【**Pack Duration**】Set a length for each record. Default is 60 minutes.
【**DVR No.**】Allocate the DVR a number. The default is 8.
【**Video Standard**】PAL/NTSC (Recommended setting: PAL)
【**Auto Logout**】Sets the length of time the DVR is left idol until it logs the user out and you will have to log back in when this happens. This range is from 0 to 60 minutes.

2.4.2 Record

Select ‘Record’ within the configuration menu, you will be able to setup the recording configuration for each camera channel:

Local channel



【**Channel**】Select a channel.
【**Compression**】Select the type of compression to reduce HDD usage (Recommended option: H.264).
【**Resolution**】Select the type of resolution you would like the channel to record in. Please note that the minor stream has to be at a lower resolution than the main stream (minor stream usually set as CIF or QCIF)

Frame Rate:

1. PAL system: 25 frames / sec.
2. NTSC system: 30 frames / sec.

【**Bit Rate**】Constant Bit rate or Variable Bitrates. There are 6 levels for image quality in Variable Bit rate.
【**Audio**】Choose channels to record sound or not.
【**Snapshot**】You can set the capture mode, picture size, picture quality and capture frequency.

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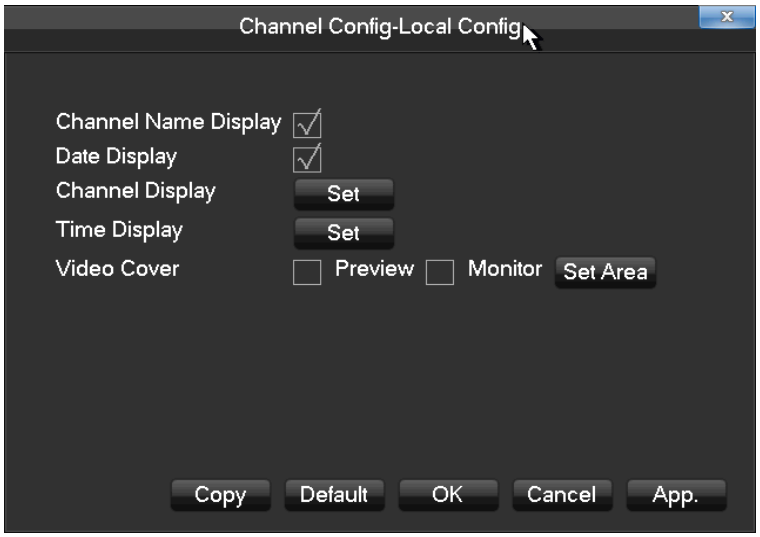
Snapshot Mode:

1. Trigger capture: Capture picture when alarm has been triggered.

2. Timing capture: set how frequently you wish a snapshot is to be taken.

Picture Size: CIF.
Picture Quality: 6 levels
Snapshot Rate: Set a capture rate for the single channel.

【More Configuration】Enter the following interface:



【Channel Name Display】Choose to either show the channel name on the screen or not.
【Date Display】Show the date on screen or not
【Channel Display】Drag a channel title and save instantly. After quitting by using the right mouse button, the position of channel title will not vary in displayer or in the monitor (varied position can be shown in the recorder and the WEB interface).
【Time Display 】Drag the time title and save instantly. After quitting by right button, the position of time title will not vary in displayer or in the monitor (varied position can be shown in the recorder and WEB interface).
【Video Cover】4 zones preview and display protect. Set what areas on the video image from the camera you wish to mask out so it does not show on the recorded footage.
【Preview】Set the masking zone. Masking zone is shown on the screen when displayed but will not be fully set in the recorded footage unless saved.
【Monitor】Set masking zone. Masking zones are shown in the screen when displaying or recording.

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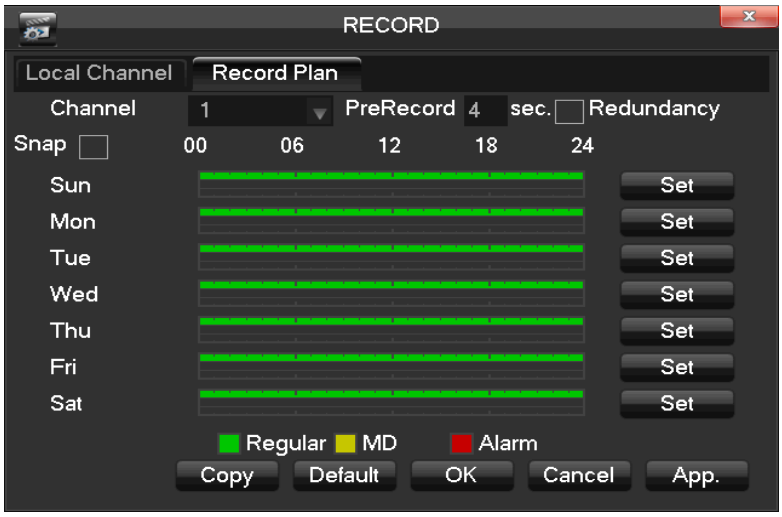
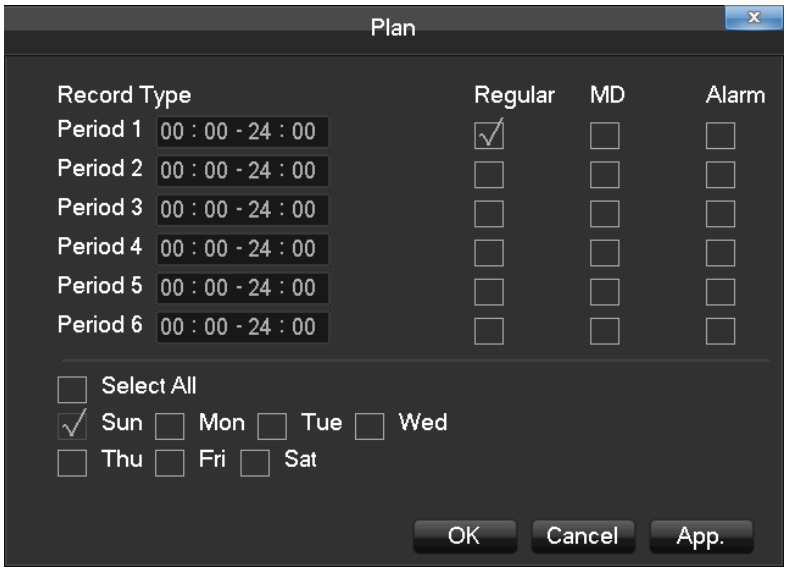
Record plan



【**Copy**】Copy configuration of the current channel to other channels.
【**Channel**】Select a channel. It uses green, yellow and red colours to show motion detection and then carries out regular records correspondingly.
【**Copy**】Copy the settings to other channels.

Click the set button to enter the following interface:



【**Time** 】Recording time; 6 periods can be set every day.
【**Normal**】Normal record.
【**Moving Detection**】Motion detection.

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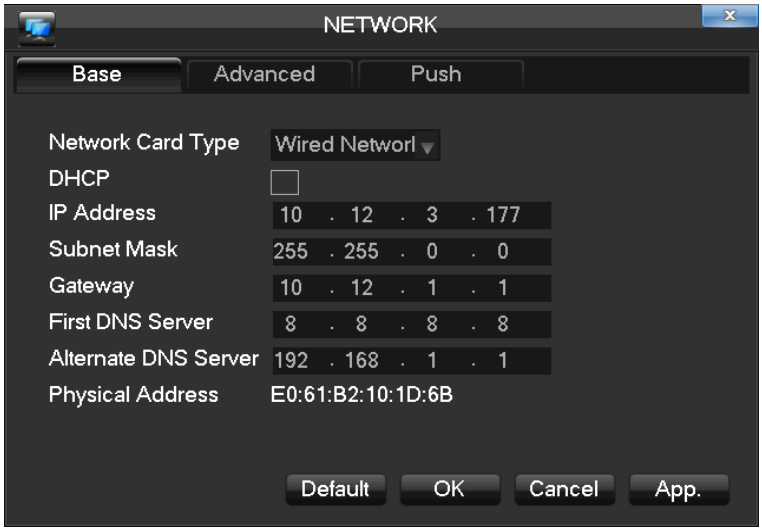
2.4.3 Network

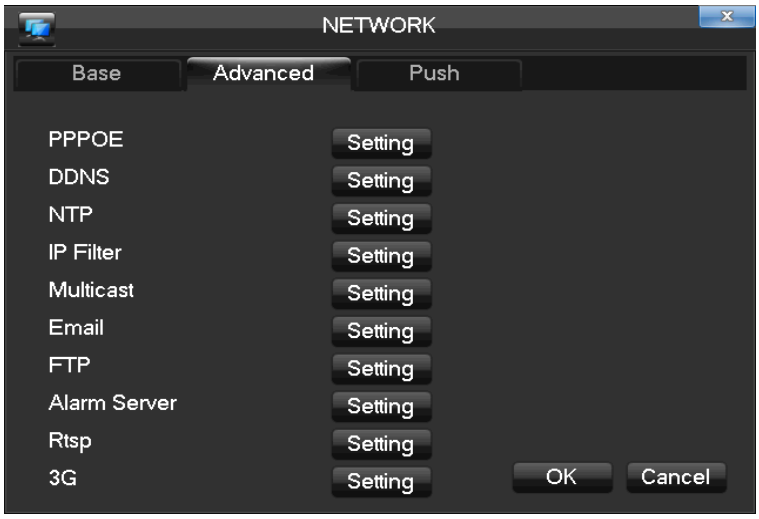
Set the DVR network parameters in “Network” interface. The default IP address is **192.168.1.88**

Base setting



【**DHCP**】Enable the DVR to obtain an IP address automatically. If this is enabled, the DVR will reboot and search for a DHCP server, and then assign a dynamic IP address. The dynamic IP address will be displayed in the menu. Enter a static IP address if there is no DHCP service available. If you are using the advanced feature PPPOE, then the IP/mask/gateway and DHCP are unable to be changed.
【**IP Address**】use（▲▼）or input numbers to modify IP, then set 【subnet mask】 and 【default gateway】for this IP.
【**First DNS Server**】DNS server IP.
【**Alternate DNS Server**】DNS alternate IP
【**Physical Address**】physical address of current net port

Advanced



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【**PPPOE**】Enable PPPOE.
Input PPPOE's username and password provided by ISP.

Operation: Using this feature, the DVR will automatically obtain a public IP address from your ISP. You can then visit the web interface of the DVR by typing this IP into Internet Explorer.

【**DDNS**】 Enable the DVR to register a DDNS hostname, which runs on a fixed IP address web client.

1. Select a DDNS type（NO-IP DDNS, Dyndns DDNS, FNT DDNS, etc.).

2. Input the registered server's IP, port, username and password.

3. Once completed, you can login into the Web client by inputting the domain name in to your web browser.

Refer to **Chapter 3 'Web and Client'** for more details.

【**NTP**】 On/Off NTP. The network time protocol allows the DVR to sync with NTP server time automatically.

Server IP: Input IP of NTP server.
Port：The default port is 123.
Update cycle: The interval time is between 1 to 65535 minutes.

【**IP Filter**】DVR authority management. If you enable the white list, only the filled IPs can be connected. This system supports a max of 64 IPs.
【**Multicast**】*Transfer Capability Set:* Enable the maximum connection amount and set network connection NUM, network connection NUM, transfer mode, and LAN download.

Port Set:

1. TCP Port. Default: 8000.
2. HTTP Port. Default: 80.
3. UDP Port. Default: 8001.
4. UPNP Port Mapping：Enable the function and make sure UPnP feature is enabled on the router.

【**Email**】Enable the function for the DVR to send email notifications to a specified email account. Set the SMTP server's port, username, password, the sender's mailbox and receiver's mailbox.
【**FTP**】Choose to upload records or images to a remote data storage server.

1. Set FTP server's IP address and port (Default: 21).
2. Create an account in FileZilla Server on the computer.
3. Fill in the username, password and remote directory which have been created.

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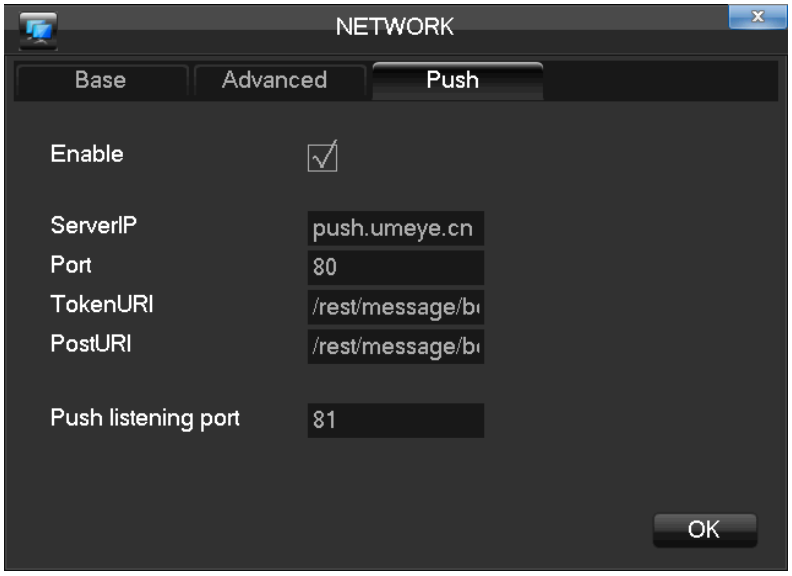
4. Set file length, channel, recording times, type and date, etc.
5. Tick alarm, motion and general records or images to upload.

【Alarm Center】Set the platform software's IP, port, and when to upload the alarms triggered footage.
【RTSP】The Real-Time Streaming Protocol and the transmission of multimedia data protocols can be used to support the RTSP protocol player to play the received footage.
【3G】Supports internet connection via a 3G card being used with a dial-up network to provide remote access via a computer workstation and/or smart device.

Push Service



The DVR supports the use of a push email service to a smart phone/ mobile device client. The interface is mainly used to open the push service so it can be enabled. When the push notification has been fully setup, the DVR will send push notifications via email messages to the mobile device you have registered with the DVR.

2.4.4 Alarm

Detect
【Motion detection】motion detection and alarm
【Zone setting】22x18 =396 zones mask
【Sensibility】6 grades
【Management】as same as local alarm
【Preview】alarm preview
【Video lose】detect video loses and alarm

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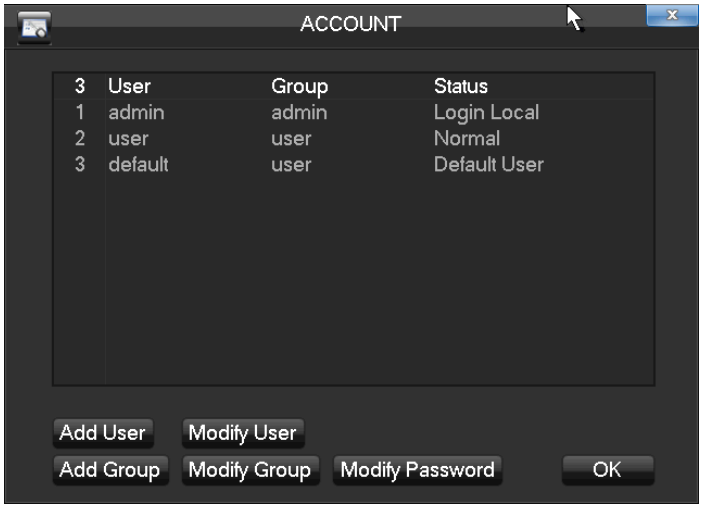
2.4.5 Account

⚠**NOTE: Group and user names can be 1-6 characters in length. Valid characters include letter, numbers, and limited symbols: underline, subtraction sign, and dot. You may not use a space as a leading or ending character.**

There is no limit to the number of groups or users. By default there are two different group levels: admin and user.

User management is determined upon two levels: the group and the user level.

Group and user names cannot be duplicated, and each user can only belong to one group.



【**Add users**】Add group member information and set authorities.

- **Default user**: admin, user and default.The password of the first two usernames is **123456**. “admin” has advanced authorities. “user” only has surveillance and playback authority.

- **Hidden default**: operate in password-less login mode, which you cannot delete. The DVR login name is automatic if no user logs in. The user can revise limits of privilege access and then operate some without logging in.

- Enter【Add users】to input username, password and select group and reusable options. Reusable allows the account to be used by multiple logins.

- Users can only belong to one group. User rights cannot exceed group rights.

【**Modify users**】Modify existing group member information and authority.
【**Add group**】Add group and set group authorities.

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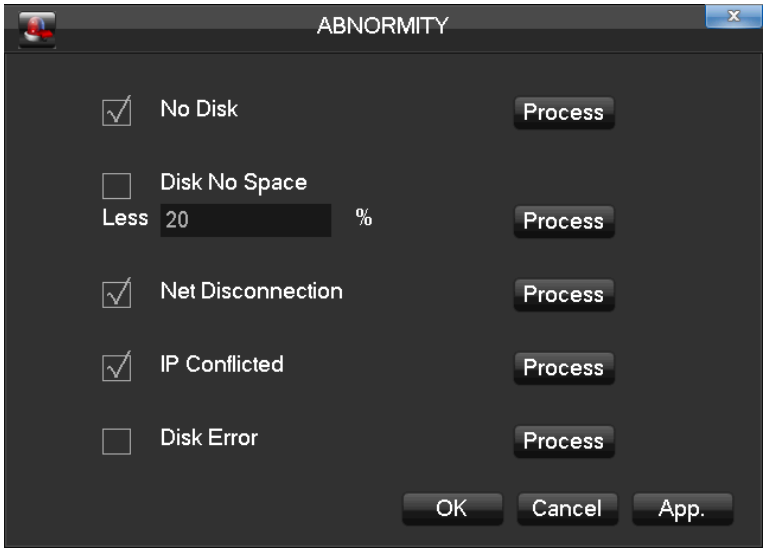
Set a group and authorise 60 items including control panel, shut down, live view, playback, record, record backup, account, system information, alarm in/out setting, system, search log, log delete, upgrade, operation authority, etc.

【Modify group】Modify existing groups information.
【Modify Password】Change the password.

⚠**NOTE: Password can be up to 6 characters long. The account with management authority can change other users' passwords.**

2.4.6 Abnormity

If there is an abnormal occurance in the operation of the DVR device then it can alert you in the form of an on screen notification, email or a push notification to your smart phone or device.



Firstly enable: 【No Disk】, 【Disk No Space】, 【Network Failure】, 【IP Conflict】 and 【Disk Error】.

【No Disk】alarms when HDD is not present or it can't be detected.

【Process】You can choose【Alarm Output】, 【Display On Screen】 and 【Send Email】 and 【pushed to phone】to show abnormal events occurring.

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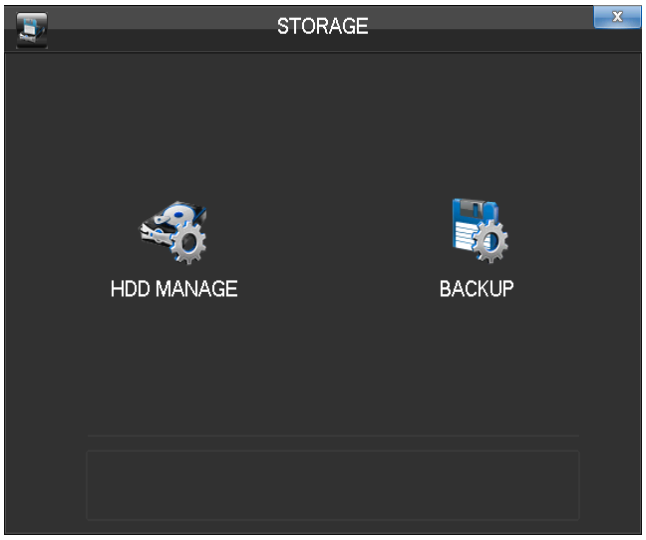
2.5 Storage

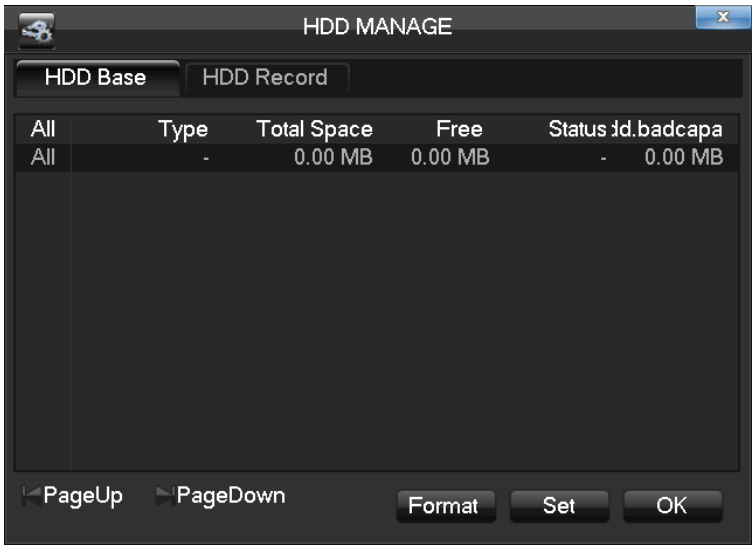
2.5.1 HDD Management



Select ‘HDD MANAGE’.

HDD Base

This tab allows you to view the DVR’s, HDD status, storage capacity, available space and working status.



【Format】This option will allow you to format an individual HDD.

NOTE: Hard disk format operation will result in the loss of video data.

【Set】to set HDD as read-write, read only or redundancy mode. In read only mode, video data cannot be over-written.

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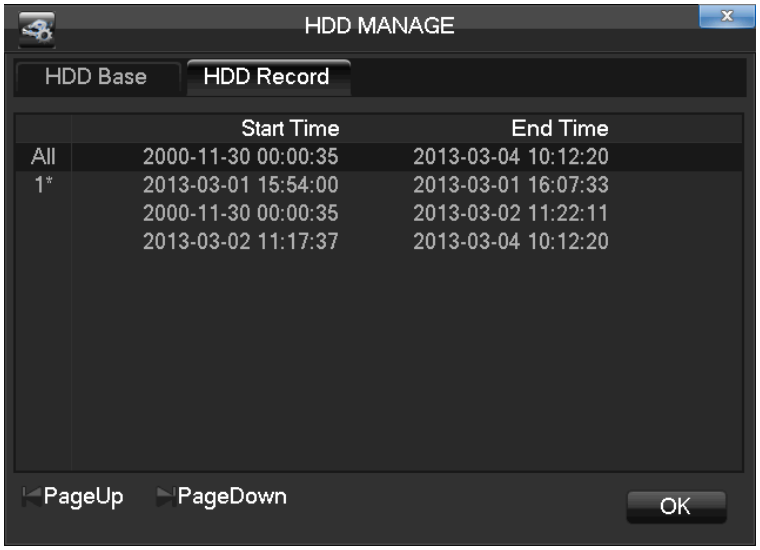
HDD Record



This menu screen will show the start and end times of each segment of video that is recorded to the HDD.

2.5.2 Backup

Select ‘BACKUP’ from the ‘Storage’ menu.

Connect an External USB device to the spare USB port to backup footage in the ‘Record Backup’ menu.

【Detect】Identifies the external USB device and displays the device’s information.
【Backup】Tick the external device and click【Backup】to enter the backup menu .

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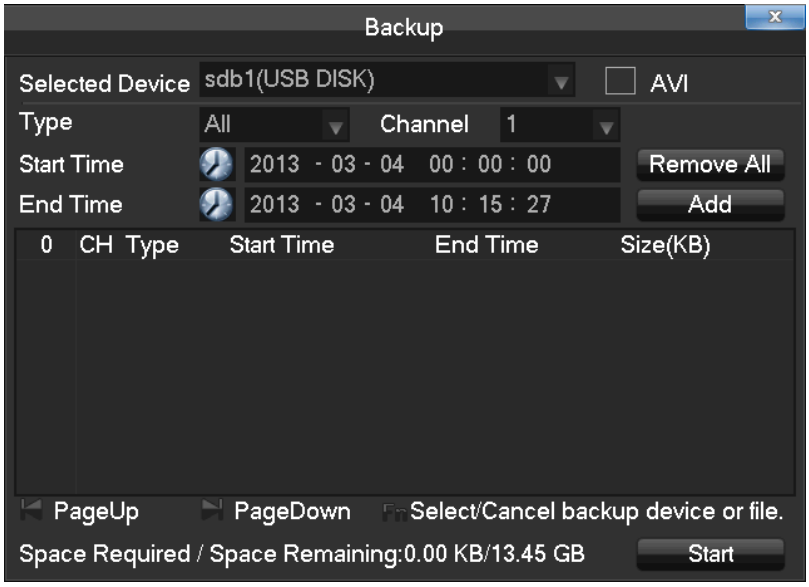

Select the records' start & end times and click【Add】to add in the list.

Click【Delete】to clear the file list.

Tick the record you want and click【Start】to instigate the backup and to also display time remaining til the recorded file is fully backed up.

【Delete】delete all data upon USB backup device

⚠**NOTE: The 【Delete】operation will cause loss of permanent recorded data.**

2.6 Output

The following image shows the 'Output' menu for peripheral device management and setup.

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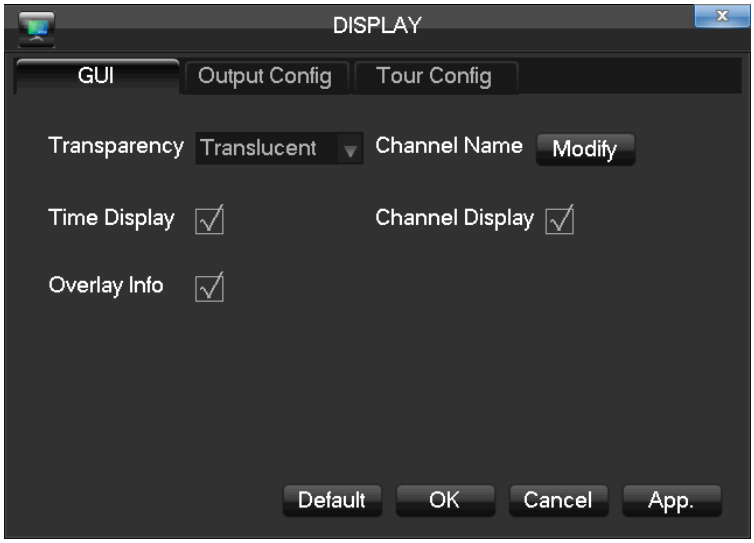
2.6.1 Display

Display mode can set the unit's display options and preferences.

GUI



【**Transparency**】To set the opacity of the interface infront of the video display panels. There are four different transparency grades.
【**Channel Name**】Modify the channel name.

Options available to tick: 【Time Display】,【Channel Display】and【Over Info】.

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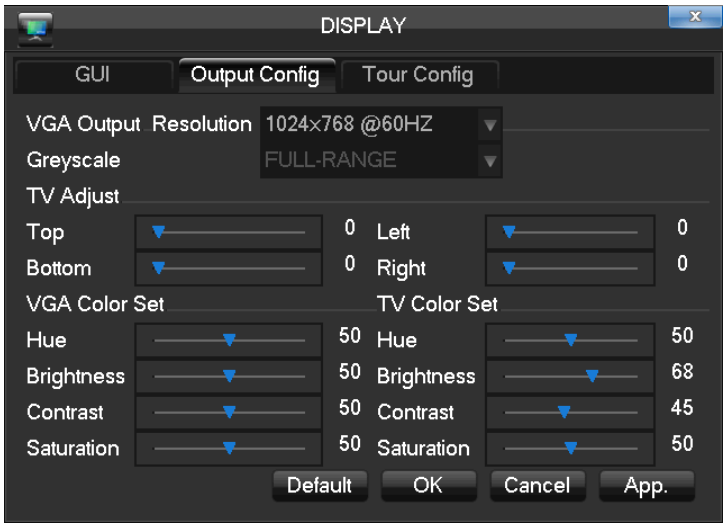
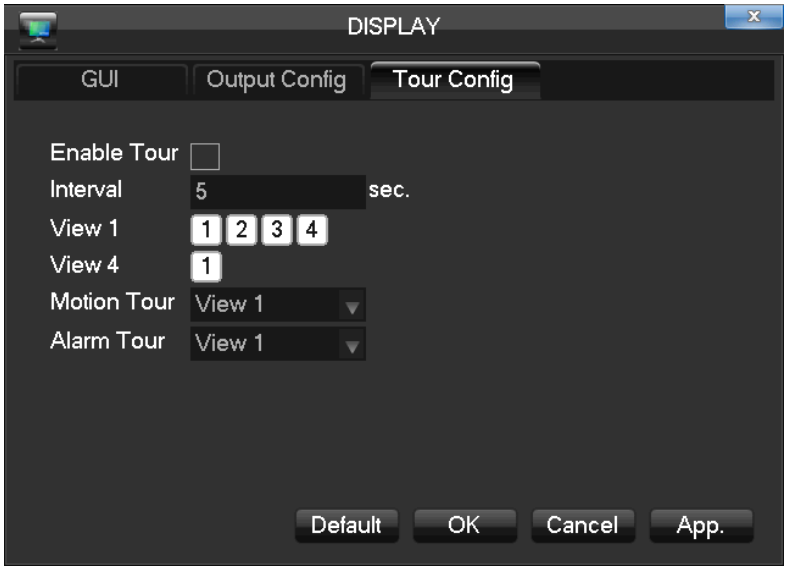
Output Configure

This option tab allows you to set the display monitor preferences.



【**VGA Output**】Select VGA resolution and refresh rate. Default is 1024×768@60Hz.
【**TV Adjust**】Adjust TV output area. Modify the image to the right size for monitor.
【**VGATV Color Set**】Adjust monitor display's hue, brightness, contrast, saturation
【**TV Color Set**】Adjust the monitor or TV brightness, contrast, saturation

Tour configuration



Enable camera channel video display cycle and the intervals between rotations. The time that can be set has to be within 5-120 seconds. The mode includes single screen, four, eight, nine, sixteen screen.

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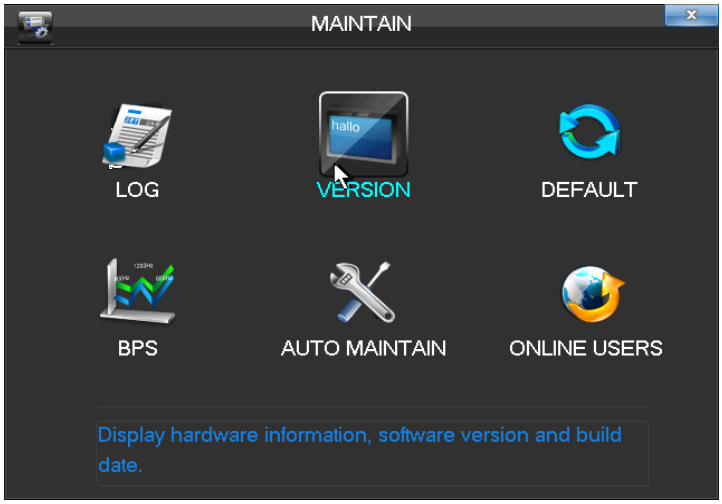
【**Motion Tour Type**】Set the motion detection tour mode.
【**Alarm Tour Type**】Set the alarm tour mode.

⚠**NOTE: Shortcut Setting: click the button at the top right corner of the monitoring picture or press the Shift Key on the virtual keyboard to switch, or to control the tour.**

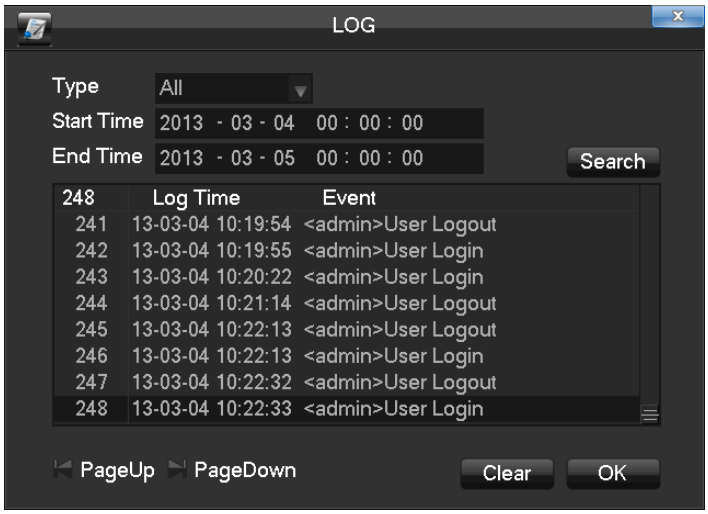
2.7 Maintain

The Maintain menu can be accessed via the Main Menu.



2.7.1 Log

The Log menu displays the login details of users on the device. You can choose a start and end time & date to view the login details within that time frame frame.



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Select the type and time then press the ‘Search’. The system will display the log in tabular form. You can also click the backup button to export the log backup to a USB storage device and view on a separate computer.

【**Type**】The drop down menu provides you with; System operation, configuration, data management, alarm event, recording, user management, log delete and document operation. Choose a particular time to filter the log list.

Click “Delete” to delete all logs.

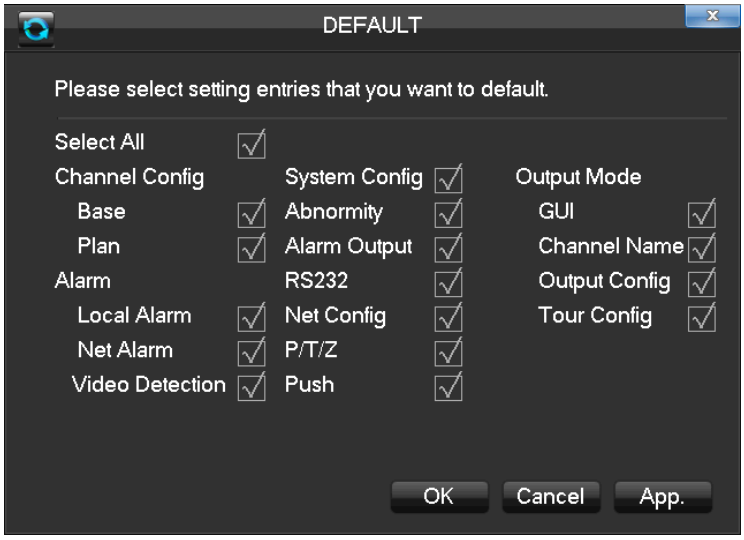
2.7.2 Version

【**Version**】Displays features, software version, etc.
【**upgrade**】Connect a USB flash device which contains the an upgraded firmware version and then click ‘Upgrade’.

⚠**NOTE：Professional assistance is recommended to ensure that the firmware on the device is correctly installed. If the firmware is incorrectly installed then it may lead to startup failure of the DVR device.**

2.7.3 Default

【Default】Restoring the default settings of the following parameters.



⚠**NOTE：Menu transparencies, language, time format, video format, IP, user ID details will <u>not</u> be restored via this menu.**

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2.7.4 BPS

【**BPS**】Show video's size, data rate of each channel by wave form.

NOTE：Estimated value just for reference

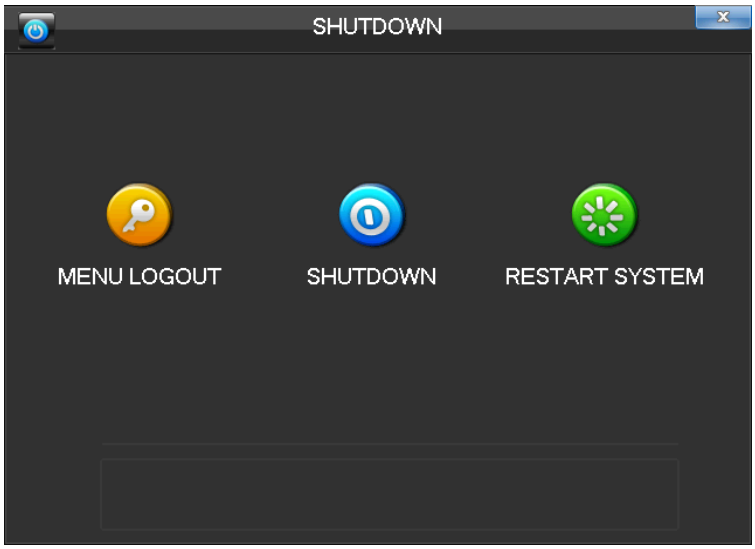
2.7.5 Auto Maintain

【**Auto Maintain**】Set auto maintenance items.

2.7.6 Online User

【**On-line Users**】Displays the current online user's IP.

2.8 Shutdown



【**Menu Logout**】Log out the current user.
【**Shutdown**】Shutdown the DVR
【**Restart System**】Reboot the DVR

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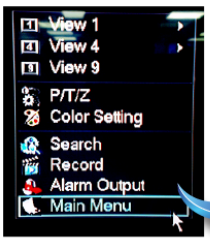
3 WEB AND CLIENT

3.1 Web Operation

This section will provide you with instructions on how to remotely access your DVR's live feed and recorded footage via a web browser on a computer work station.

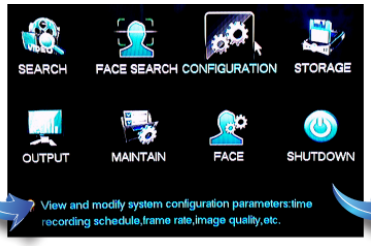
3.1.1 Network Connection

STEP 1:



Right Click on the screen and select the '**Main Menu**' option.

STEP 2:



Select/Click on: '**Configuration**'

STEP 3:

Select/Click on: '**Network**'

STEP 4:

Select/Click on: '**P2P**' tab within this menu. Input **3000** in to the **Local Port** field. Take note of the IP address, found on the **Base** tab.

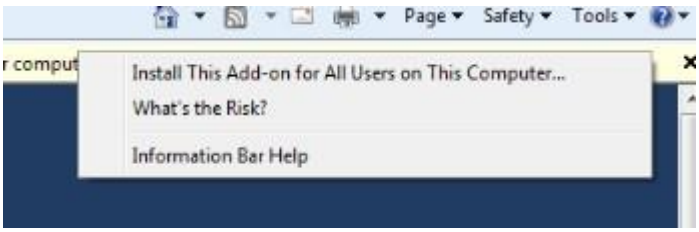
STEP 5:

You now need to access your router's setup interface to input the **3000** port number (input fields are usually named '**TCP**' and found in the advanced settings of the interface). Please refer to your router's manual for details on how to '**Port Forward**'.

STEP 6:

In the address bar on your Internet Explorer Browser window, type in the IP address assigned to the DVR (This is the IP address you've taken note of in **Step 4**).

Install ActiveX: Right click and choose install. If installation is blocked by Windows, please add the IP as a trusted site or lower your Internet Explorer security settings to allow this.



Install Control

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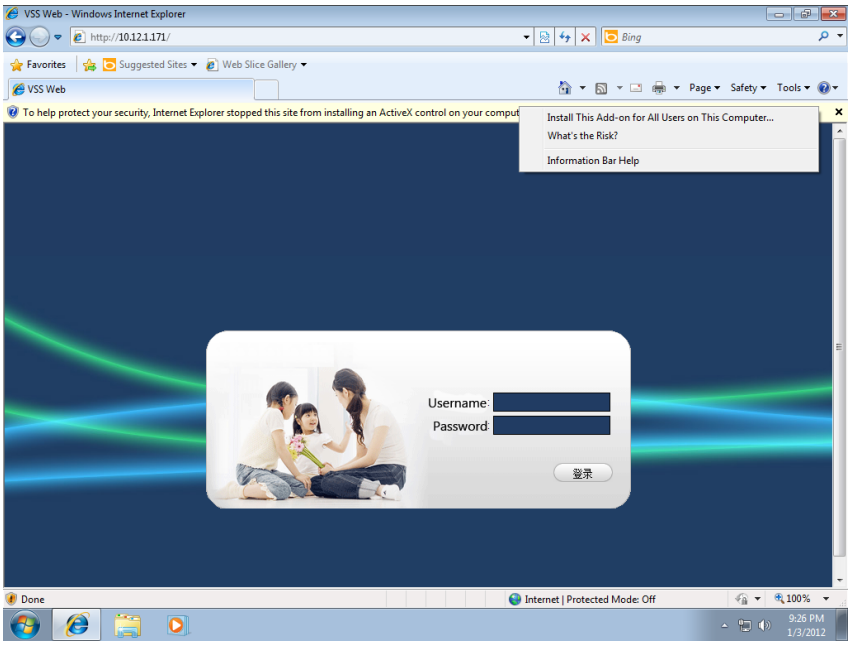
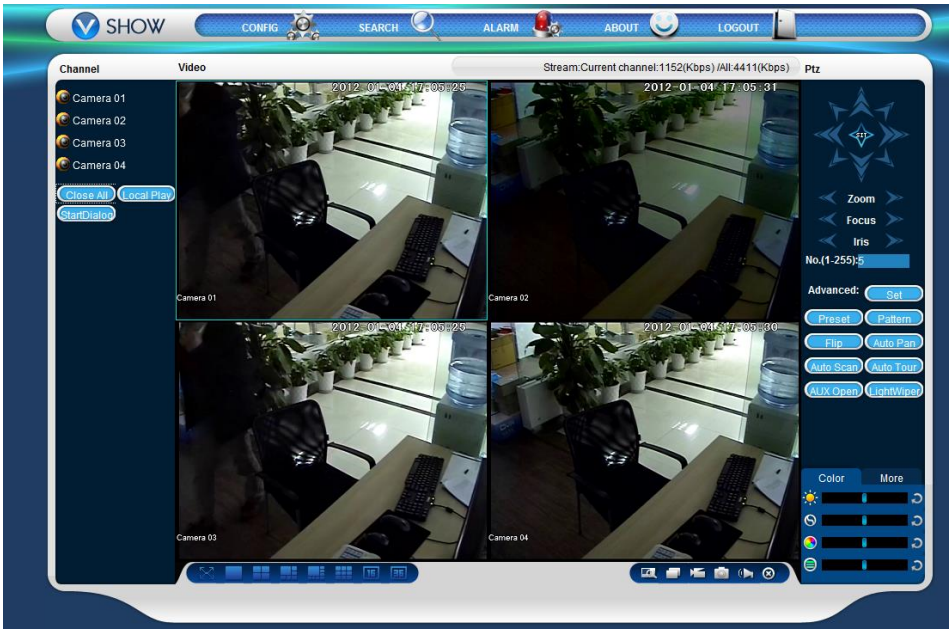
The following interface will popup when you input your username, password and click “Login”. Click “Exit” to quit.



Login screen

3.1.2 The Interface Of Web Operations

If you have successfully completed the previous steps and logged in successfully you will see the WEB user interface (GUI) below:



WEB Interface

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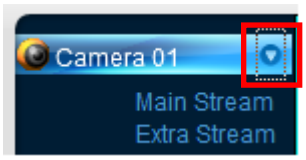
Description:

Index	Name	Description
1	Channel	Channel selection
2	Function key	Local playback: playback local record Open all: play live views in surveillance window
3	Surveillance window	Change window layout
4	Image color & other saturation	Image color: modify brightness, contrast and Other: set capture path, record download path and reboot
6	Menu	System configuration, record search, alarm setting, exit, etc.

3.1.3 The Real-time Monitoring

Whilst in the WEB interface, select the focus window within the live window. The focus window has a light blue border.

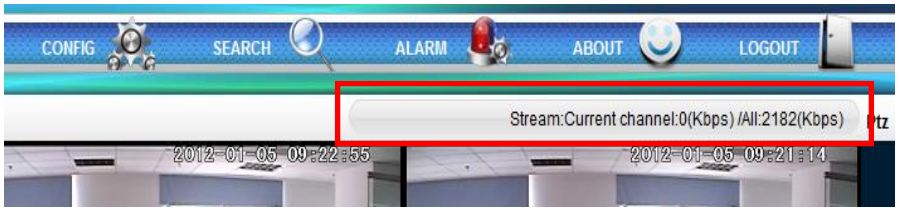
From the left channel column select channel, as shown in the following interface.



Channel Choices

Click on 2 areas in upper right corner and you can choose to open / close the channel of the main stream or secondary stream. Above the live video window the current

DVR's IP and rate information is shown (please see image below).



Stream information

Lower left corner shows the current video channel name.

Upper right corner shows the current video time information.

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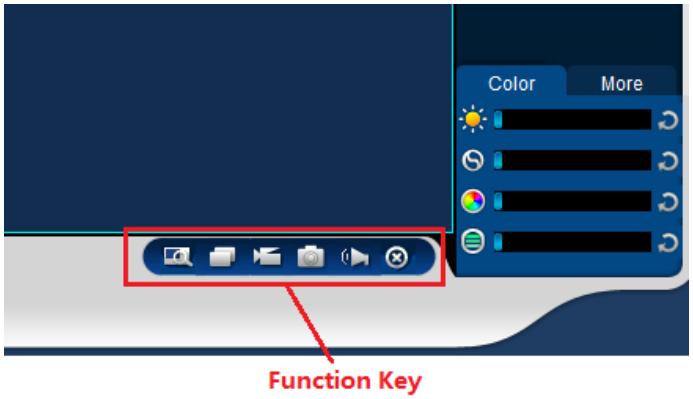
Click “ ”（Lower left corner of the display window）to switch between single screen and multi-screen.

Lower right corner of the display window will display the function keys, as the following interface (next page).



Function Key

Area zoom: Video images can be enlarged.

Multi-screen switch: switch from single screen to multi-screen and vice versa.

Local record: save and record video to a local HDD while in a live view. Set recording path in configuration.

Capture: capture of the present channel, set the path in “other”.

Sound: on/off sound.

Off video: off the focus window video.

3.1.4 Configuration

Access DVR’s local configuration menu by clicking the ‘System Setting’ option.

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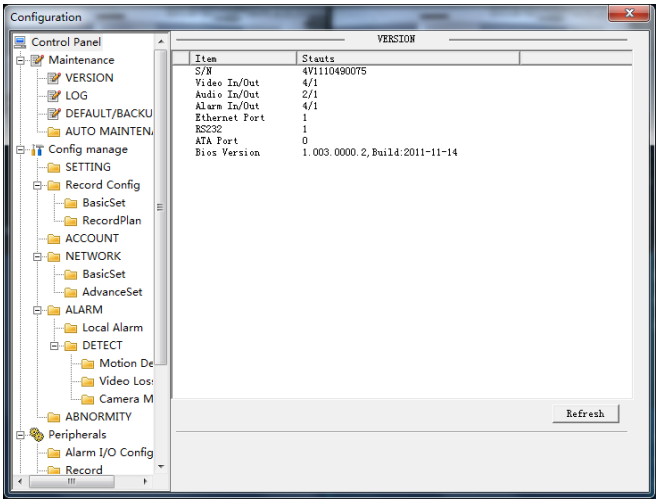

Configuration

3.1.5 Search Record

Click the ‘Search record’ option to open the search interface, you can search and operate record, alarm, motion, local record.

Search record

By selecting the record type, start & end times, and clicking the check button, you will get a list of files recorded on to the DVR. Select the appropriate file and download it so it can be played.

Play

Double click a search result to play in video window. Control the playing video by the control keys at the bottom of the user interface window. At this point, the bottom of the video window will display the video control buttons, where video playback can be controlled.

Download: select a searched video to download to local. The download speed and percentage are displayed on the bottom of the screen.

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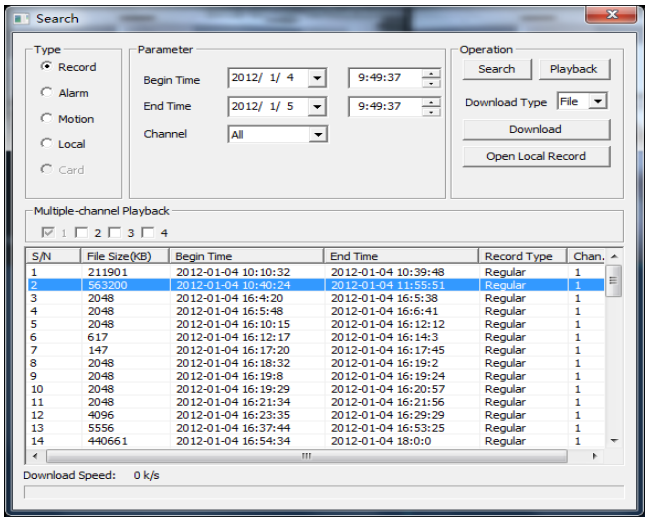
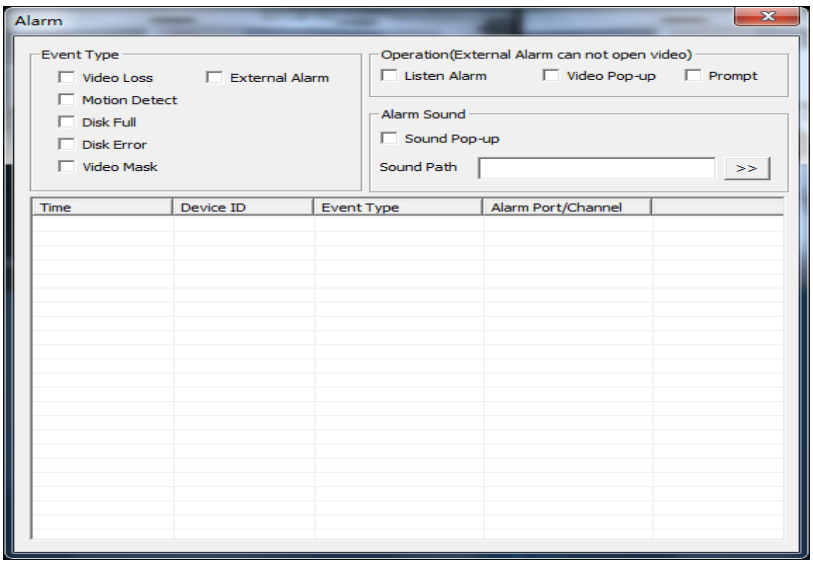


Searching

3.1.6 Alarm Configuration

Click the 【Alarm】 to enter the alarm setup menu, users can set up and operate the alarm mode.



Alarm configuration

Choose a type of alarm on the menu. These options include; monitor video loss, motion detection, disk full, disk error, video mask and external alarm.

Click 【Video Pop-up】, this opens the video loss, motion detection, hard disk full, hard disk failure, video block and video encoder alarm pop-up linkage.

Click 【prompt】opens the prompt: When an alarm occurs in real-time monitoring it will make a popup alarm window appear in the menu.

Click 【Sound Pop-up】, you can choose a pre-recorded alarm tone on the local hard drive when an alarm occurs, tone file in WAV format.

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4 TROUBLESHOOTING

DVR startup failure or continuously reboots

Possible reasons:

1. The system has been damaged from a bad DVR update.
2. There is a problem with the DVR main board, please contact supplier.
3. There is a HDD error. Replace faulty HDD.

Remote control does not work

1. Check for batteries in the remote control.
2. Check batteries' power level.
3. Check if remote receiver is obscured.
4. Check if the DVR's address corresponds to the remote control address.

Blurred screen in preview mode

Possible reasons:
Please make sure your cameras match your video format selected in the General menu. E.g. camera is NTSC standard but the DVR is PAL standard, the preview would be blurred.

Blurred screen in playback mode or failure to playback records

Possible reasons:

1. Procedure error, reboot the DVR
2. HDD error, test or change out the HDD
3. DVR hardware failure, contact your local supplier

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When you can’t connect DVR through network

1. Check the physical network connection is correct.
2. Check the DVR network configuration parameters.
3. Check whether IP conflicts exist in network.

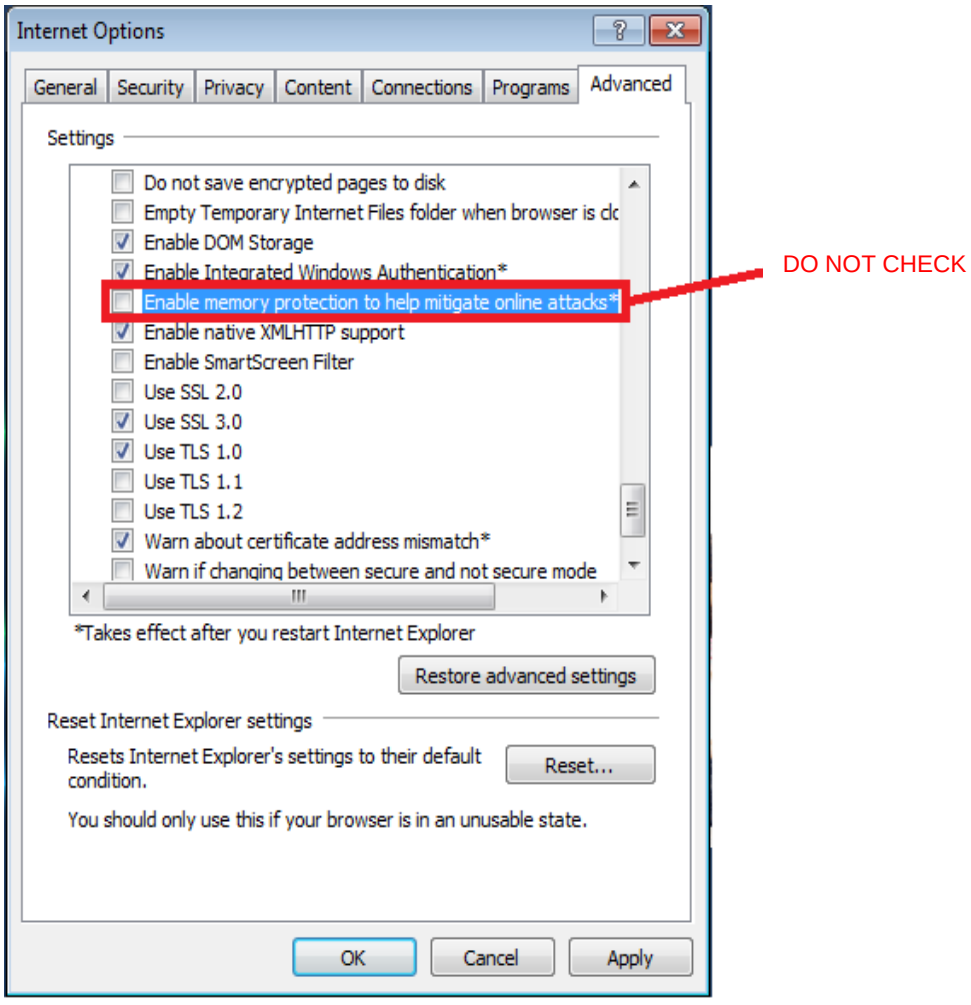
Download recording can not be played

Possible reasons:

1. Player installation error.
2. The USB or HDD device has an error.
3. Do not install graphic software later than DX8.1.

Internet Explorer Crash

Close IE explore, enter into the tool bar:



IE tool bar

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SENTIENT 960H MOBILE APP

To be able to remotely access your DVR from your mobile smart device please download one of our Sentient 960H apps from either the Google Play or iTune stores.

Scan the QR codes below with you mobile smart device to be directed straight to the app download source:

GOOGLE PLAY APP DOWNLOAD

iTUNES APP DOWNLOAD

To remotely access your DVR via a PC or computer workstation, connected to the internet, please scan the QR code below and register to our P2P website:

www.sentientconnect.co.uk

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For more information about our DVRs and available cameras & accessories, please visit our website:

www.maplins.co.uk

Alternatively scan this QR code with your smart phone to be directed instantly to our website.

Download our mobile apps to remotely operate your DVR on the move.

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